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FINANCIAL STABILITY AND THE ROLE OF THE CENTRAL BANK

Stability of the financial sector is important for monetary authorities, as monetary and financial sector stability are closely connected. History provides many examples where problems in the financial sector led to monetary instability.

The Great Depression in the US is probably the best-known example where bank failures combined with an inadequate response by the monetary authorities resulted in a prolonged economic crises. What causes instability of the financial sector? The balance sheet of banks makes them vulnerable. Banks provide long-term loans, which are at least partly funded through deposits, which are generally withdrawable on demand. Lack of trust may cause depositors to withdraw their money. Apart from this traditional run on a bank, a liquidity crisis can also occur due to illiquidity in money or capital markets. Doubt about the solvency of a bank may lead to a shift in portfolios away from bank liabilities in favor of government securities or corporate assets. A massive withdrawal of deposits or a shift in portfolios could force a bank to liquidate its loan portfolio on unfavorable terms. So, a process that starts as a liquidity crisis could lead to a solvency crisis. Furthermore, problems at one bank could easily spread towards the rest of the financial system. If various banks would go bankrupt, the resulting decline in the money supply could lead to a serious recession. Deposit insurance and liquidity support by the central bank may prevent such a scenario from happening. However, the lender of last resort function of the central bank comes at the price of increased *moral hazard*. A bank may provide more risky loans in the knowledge that deposit holders are insured and the central bank may come to the rescue. A further problem of deposit insurance arises

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Table 1. The Role of Central Banks in the European Union in Promoting Financial Stability.

Country	CB responsible for financial stability?	Supervisor
Austria	Yes	Ministry of Finance
Belgium	Yes	Banking and Finance Commission
Denmark	Yes	Financial Inspectorate
Finland	Yes	Bank Inspectorate/Bank of Finland
France	Yes	Banque de France/Commission Bancaire
Germany	Yes	Federal Banking Supervisory Office and Deutsche Bundesbank
Greece	Yes	Bank of Greece
Ireland	Yes	Central Bank of Ireland
Italy	Yes	Banca d'Italia
Luxembourg	Yes	Commission de Surveillance du Secteur Finance (CSSF)
Netherlands	Yes	De Nederlandsche Bank
Portugal	Yes	Banco de Portugal
Spain	Yes	Banco de España
Sweden	Yes	Swedish Financial Supervisory Authority
UK	Yes	Financial Services Authority
EMU	No	National supervisors

Source: Update by Eijffinger and De Haan (2000) of Goodhart and Schoenmaker (1995)

due to *adverse selection*. The people who are most likely to produce the adverse outcome insured against (bank failure) are those who most want to take advantage of the insurance. Therefore, regulation and supervision are needed. Banking regulation generally consists of restrictions on bank assets holdings and capital requirements.
In some countries banking supervision is carried out by the central bank. In other countries this task is performed by another institution(s), sometimes in close co-operation with the central bank (see Table 1). Following the recent adoption by the UK[1] and Luxembourg of the separation approach, only six EU member countries have the central bank as the only authority responsible for banking supervision.
According to Lannoo (1999) the development that central banks retreat from supervisory functions can be explained as follows. First, banking is becoming an increasingly complex business and less clearly defined. Leading banks are active in several jurisdictions as providers of a whole series of financial services. Linked to this are new developments in financial supervision, which increasingly emphasize the role of self-regulation and internal risk management in financial institutions. Finally, there is increasing acceptance that the government, not the central bank, should take responsibility for ultimate financial support. This was demonstrated earlier this decade in Norway and Sweden, but also more recently in France. In those cases there was no alternative but to rely on taxpayer funding, leading to more demand for political control of supervisory functions.
The ECB is not entrusted with any direct responsibility related to prudential supervision of credit institutions and the stability of the financial system.[2] These functions are in the realm of the competent national authorities. In most EU countries the central bank plays a role here, albeit that the supervision is often entrusted to another agency (see Table 1). Limiting the ECB functions to monetary policy is part of a general trend of withdrawal from supervisory functions in central banking and fits with the home country control principles of the single market. Specific expertise in and knowledge of prudential control is situated at the local level, where the bulk of the operations of financial institutions are still located (Lannoo, 1999). There is no agreement on the role of the central banks in supervision (see Padoa-Schioppa, 2003). The ECB (2001) has argued in favor of the role of National Central Banks (NCBs) in supervision. In this way systemic threats to stability within the euro area can be better met. Another possibility is to have a network of single supervisory agencies that undertake supervision. As can be seen in the Table 2, all central banks, except the ECB, are involved in financial stability and the majority of NCBs is involved in financial supervision.

Trade-Off between Central Bank Involvement and Supervision Unification

Masciandaro (2004) focuses on the trade-off between a central bank and a single authority. According to him the centralization versus decentralization question in the European context is a second-order problem. Solutions will depend on the European national answers concerning the optimal design of the financial supervisory framework, although it is correctly noted that the European choice does not have to be the same one as the national choices. In addition, the choice

Table 2. Central Bank Involvement in Financial Supervision.

Countries	Central bank	Involved in finan. stability	Involved in financial supervision
EU			
Austria	National Bank of Austria	Yes	Partly, banking supervision
Belgium	National Bank of Belgium	Yes	No
Denmark	Danmarks Nationalbank	Yes	No
Finland	Bank of Finland	Yes	Partly, banking and securities
France	Banque de France	Yes	Partly, prudential superv. (B, S)
Germany	Deutsche Bundesbank	Yes	Partly, banking supervision
Greece	Bank of Greece	Yes	Yes, banking supervision
Ireland	Central Bank of Ireland	Yes	Yes, financial supervision
Italy	Banca d'Italia	Yes	Yes, prudential superv. (B, S)
Luxembourg	Banque Cent. de Luxembourg	Yes	No
Netherlands	The Netherlands Bank	Yes	Yes, prudential superv. (B, S, I)
Portugal	Banco de Portugal	Yes	Yes, prudential superv. (B,S)
Spain	Banco de Espana	Yes	Yes, banking supervision
Sweden	Sveriges Riksbank	Yes	No
UK	Bank of England	Yes	No
Euro area	European Central Bank	No	No
Outside EU			
Australia	Reserve Bank of Australia	Yes	No
Canada	Bank of Canada	Yes	No
Japan	Bank of Japan	Yes	No
US	Federal Reserve Board	Yes	Yes, banking supervision and financial holding companies

Note: B = Banking, S = Securities, I = Insurances. Source: Schoenmaker (2004), who adapted it from Goodhart and Schoenmaker (1995), Eijffinger and De Haan (2000) and ECB (2002).

between centralization and decentralization is closely related to the choice between a financial single authority model and multi-authority model. Furthermore, the centralized-decentralized question is less urgent then the national dilemmas. The blurring effect makes it urgent for countries to choose a supervisory regime. Instead decisions at the European level can be taken after some data and experiences are gained. Therefore, Masciandaro analyses the choice between a Financial Single Authority model (FSA model) and Multi-Authority model (MA model). He introduces two indices, namely the *Financial Authorities' Concentration index* (FAC index) and the *Central Bank as Financial Authority index* (CBFA index). The first index shows that the degree of concentration of supervisory power has increased in the developed countries. This result is based on an analysis of 69 countries and holds especially for the EU. A higher FAC index indicates a higher concentration of supervisory power (looking at three sectors: banking, securities markets and insurance). The maximum score of the FAC index is 7. When comparing a sample of 30 OECD countries, the number of industrialized countries with the maximum unification of powers is higher in Europe. The same holds for the average level of unification. Table 3 gives an overview of the FAC index of European countries. When compared to the 2004 and 2007 accession countries, the EU countries have on average a higher degree of concentration of supervisory power.
The second index measures the involvement of the central bank in financial supervision (see Table 4. A higher value of the index indicates that the central bank has responsibility in more sectors. Average central bank involvement is somewhat higher in the European industrialized countries when compared to other industrialized countries. Central bank involvement in financial supervision is on average the highest in developing and emerging countries. Central bank involvement is higher in the EU sample than in the sample with the European industrialized countries. The accession countries have on average a lower level of

▼*Table 3. Supervision Authorities in EU countries and 2004 and 2007 Accession Countries (in 2003).*

Country	Banking sector (b)	Securities sector (s)	Insurance sector (i)	Rating	Weight	FAC index
Austria	U	U	U	7	0	7
Belgium	BS	BS	I	5	0	5
Bulgaria	CB	S	I	1	0	1
Cyprus	CB	S	I	1	0	1
Czech Rep.	CB	S	I	1	0	1
Denmark	U	U	U	7	0	7
Estonia	U	U	U	7	0	7
Finland	BS	BS	I	5	0	5
France	CB, B1, B2, B3	CB, S	I	1	-1+1	1
Germany	U	U	U	7	0	7
Greece	CB	S	I	1	0	1
Hungary	U	U	U	7	0	7
Ireland	CB	CB	CB	7	0	7
Italy	CB	CB, S	I	1	1	2
Latvia	U	U	U	7	0	7
Lithuania	CB	S	I	1	0	1
Luxembourg	BS	BS	I	5	0	5
Malta	U	U	U	7	0	7
Netherlands	CB	CB,S	I	1	1	2
Poland	B	B,S	I1, I2	1	1-1	1
Portugal	CB	CB,S	I	1	1	2
Romania	CB	S	I	1	0	1
Slovak Rep.	CB	SI	SI	3	-1	2
Slovenia	CB	S	I	1	0	1
Spain	CB,BS(**)	CB,S	I	1	1-1	1
Sweden	U	U	U	7	0	7
Turkey	B	G	I	1	0	1
UK	U	U	U	7	0	7

Source: Masciandaro (2004a) part of Table 1.
Note: B = authority specialised in the banking sector; I = authority specialised in the insurance sector; S = authority specialised in the securities markets; U = single authority for all sectors; BS = authority specialised in the banking sector and securities markets; BI = authority specialised in the banking sector and insurance sector; CB = central bank; SI = authority specialised in the insurance sector and securities markets.
** (b)= banking or central banking law; (s)= security markets law; (i)= insurance law*
*** = state or regional agencies*
FAC index = 7 if there is a single authority for all three sectors, FAC index = 5 if there is a single authority for the banking sector and securities markets, the FAC index is 3 if there is a single authority for the insurance sector and the securities markets, or for the insurance sector and the banking sector, the FAC index = 1 if there is an independent specialized authority for each sector. 1 is added if in the country there is at least one sector with two authorities assigned to supervise and one of these authorities is also responsible for at least one other sector. 1 is subtracted if in the country there is at least one sector with two authorities assigned to supervise, but neither of these authorities has responsibility for another sector.

central bank involvement than the current EU member states. Differences in the field of financial supervision unification seem to be higher than differences in the degree of central bank involvement.
By using these two indices it is possible to identify each national institutional structure. By combining low and high values for the FAC and CFBA index four supervisory models can be present. Masciandaro (2004a) shows that two models are observed most frequent, namely the *single financial authority regime* (in 19 countries, including 8 EU member states) and the *central bank dominated multiple supervisor regime* (in 41 countries, including 6 EU member states). The first regime concerns countries that have weak central bank involvement (low CBFA) and a high level of unification of powers (high FAC). The second regime consists of countries with high central bank involvement (high CBFA) and a low level of unification powers (low FAC). When the EU member states and the accession countries (in total 27 countries) are considered together, a strong polarization can be seen. There are 12 countries with the single financial authority regime, 11 countries with the multiple supervisor regime. Exceptions are Ireland with a high degree of consolidation and a high level of central bank involvement and three remaining countries that have a low degree of consolidation and central bank involvement. From this observation it can be concluded that there is a trade-off between the involvement of the central bank and the unification power. The degree of supervision unification and central bank involvement appear to be inversely related. Masciandaro gives two explanations for this trade-off. The *blurring hazard effect* is the fear that the function as lender of last resort of the central bank might be spread to other institutions if the central bank supervises the insurance and securities trading firms. The *monopolistic bureau effect* is the idea that policymakers are feared that an overly powerful bureaucratic agency is created in a country in which the central bank involvement in supervision is high and therefore want more supervisory agencies. The trade-off between the involvement of the central bank and the unification power is supported by econometric analyses of Masciandaro and Porta (2004) and Masciandaro (2004b). Masciandaro (2004b) states that it is not possible to define the optimal degree of financial supervision a priori. Policymakers who decide whether to maintain or reform the supervisory regime calculate the expected optimal degree of financial supervision. The dependent variable in the analysis of Masciandaro is the supervisory regime with one or more authorities. The political delegation process and the dynamics of other structural economic and institutional variables are expected to influence the dependent variable. The *Financial Authorities Unification index* (FAU index) is a measure of the degree of unification of financial supervision powers. This index is exactly the same indicator as the FAC index in Masciandaro (2004a). Masciandaro (2004b) has tested econometrically with probit and logit models the trade-off between the degree of supervision unification and the degree of central bank involvement in supervision controlling for a number of governance and legal factors. The specification below, Eq. (1), represents his best outcome of all specifications tested by him.

Table 4. CBFA Index and FAC Index in EU Countries and 2004 and 2007 Accession Countries (in 2002).

Country	CBFA index	FAC index
Austria	1	7
Belgium	1	5
Bulgaria	2	1
Cyprus	2	1
Czech Republic	2	1
Denmark	1	7
Estonia	1	7
Finland	1	5
France	3	1
Germany	1	7
Greece	2	1
Hungary	1	7
Ireland	4	7
Italy	3	2
Latvia	1	7
Lithuania	2	1
Luxembourg	1	5
Malta	1	7
Netherlands	3	2
Poland	1	1
Portugal	3	2
Romania	2	1
Slovak Republic	2	2
Slovenia	2	1
Spain	3	1
Sweden	1	7
Turkey	1	1
UK	1	7

Source: Masciandaro (2004a) part of Table 2.
Note: CBFA index = 1 if the central bank has responsibility in no sector, CFBA index = 2 if the central bank has responsibility in one sector, CBFA index = 3 if the central bank has responsibility in two sectors and CBFA index = 4 if the central bank has responsibility in all three sectors.

$$\begin{aligned}(FAU) &= b_1 + b_2\,(CBFA) + b_3\,(MvBdum) + b_4\,(mcap) + b_5\,(goodgov) \\ &+ b_6\,(gnpcapita) + b_7\,(EUmember) + b_8\,(Anglosaxon) + b_9\,(French) \\ &+ b_{10}\,(German) + b_{11}\,(Scandinavian) + b_{12}\,(Latitude) + e_t \qquad \text{eq(1)}\end{aligned}$$

In this equation *MvBdum* index (Market vs Bank Index) is a qualitative control variable for the private governance factor. The financial system model of a given country is expressed by it.[3] *Mcap* (market capitalization/GDP) is a quantitative control variable for the private governance factor and measures the securities market size relative to GDP.[4] *Goodgov* (good governance) is a control variable for the public governance factor. The structural capacity of the government to formulate and implement sound policies can be indicated by it and it can represent the control variable for the politics and finance view.[5] *Gnpcapita* (gross national product per capita) is a control variable for the economic factor and EU membership is a control variable for the geographical factor, which indicates whether a country is a EU member. The Anglo-Saxon, French, German and Scandinavian dummies indicate what the legal root of a given country is and therefore it represents the control variables for the law and finance view.[6] *Latitude* is a control variable for the institutional factor and represents the control variable for the endowment view. [7]

Masciandaro (2004b) finds that when the involvement of the central bank in supervision increases, the likelihood of greater unification in supervision, and therefore the probability of having one single financial authority, decreases. This result holds for various model specifications and country samples. Masciandaro states that it is more likely that there is a Single Authority model if the financial system is smaller, the private governance model is more equity dominated, and the public governance goodness is higher. In addition a relationship between the concentration of powers and the institutional framework seems to exist. There is a positive relationship between the degree of supervision unification and the German and Scandinavian rule of law.

In Masciandaro and Porta (2003) additional evidence for the negative relationship between the central bank involvement in supervision and the unification in supervision was found. Masciandaro and Porta estimated the following specification, Eq. (2):

$$(FAU) = b_1 + b_2\,(CBFA) + b_3\,(FD\ Index) + b_4\,(MvBdum) + b_5\,(BankConcentration\ index) + b_6\,(Government\ Market\ Aversion) + e_t \quad eq(2)$$

The definitions of the variables FAU, CBFA and MvBdum are the same as in the analysis of Masciandaro (2004b). In the above equation *FD index* is a dummy that measures the development of the financial system of a country.[8] The *Bank Concentration index* is an indicator of the degree of banking concentration in a given country and the last variable added, *Government Market Aversion,* in the above equation measures the aversion of a government to market policies. The results of Masciandaro and Porta (2004), based on a sample of 68 countries, show that the probability of getting a single financial authority will be higher in case of lower central bank involvement, a better developed financial system, a more market-oriented intermediation model, a more concentrated intermediation system and a government that supports market policies. In modifying the concentration of powers within a country the previous variables should be taken into account. When Masciandaro and Porta take a look at the 27 countries of the (future) enlarged EU the results indicate that if the CBFA dummy is excluded, which was still negative and significant, all other variables are not significant anymore (although they still have the same sign). This result can be explained by looking at the ten EU accession countries. Of these countries four have only one financial authority, five have minimal involvement of the central bank in both financial regulation and supervision. Only two countries have a relative developed financial system and a market-based model of intermediation is only present in two accession countries. There is not a lot of difference between current EU members and accession countries in the degree of involvement of the central bank. Instead financial concentration is lower in the accession countries. In addition they have a relatively less developed banking system and securities market. Furthermore their governments want less market-oriented regulatory policies. The only thing that does not support the empirical results is the fact that the concentration of intermediaries is slightly higher in the accession countries.

Masciandaro and Porta conclude that there seems to be a reform mechanism working. This can be interpreted in an optimistic and pessimistic way. The first view states that although market development and the

Table 5. The Organizational Structure of Financial Supervision: Basic Models for Europe.

European models	Basic models		
(cross-border)	1. Sectoral	2. Cross-sector: functional	3. Cross-sector: integrated
A. Decentralized & Co-operation	Co-operation in sectoral committees	Co-operation in functional committees	Co-operation between national FSAs
B. Co-ordination	Co-ordination between national sectoral supervisors: -Harmonisation in sectoral regulation -Convergence in supervisory practices in banking, insurance and securities respectively	Co-ordination between nat. funct. supervisors: -Functional EU-wide legislation -Convergence in supervisory practices in prudential supervision and conduct of business supervision	Co-ordination between national FSAs: -Single financial services market act within the EU -Convergence in supervisory practices between national FSAs
C. Centralized	Separate systems of European banking, securities and insurance supervisors	European system of prudential supervisors European system of conduct of business supervisors (broad SEC)	European system of FSAs (EFSA)

Source: Kremers, Schoenmaker and Wierts (2001) adoption of a market-oriented model is not present yet, the indicated trend is in line with a strategy of *getting ahead of the game*. Instead the more pessimistic view states that the accession countries have chosen too early a model that is not fully in line with their current financial structures. Masciandaro and Porta state that it is of course possible that the model used for the structural choices is different from the one they proposed.

Integration of European Financial Markets

De Boissieu (2002) argues that a lot of convergence has occurred within the European banking sector but there are some factors hindering the achievement of a single market. Examples are the divergences in the structure of financing, gaps between countries in the field in legislations that are too large, differences in the attitude of public decision makers and in the behavior of private investors. Further integration is expected to occur in the form of more banking consolidations, cross-border mergers or acquisitions, increased banking concentration and increased conglomeration. Therefore, the amount of externalities will increase.

Schoenmaker (2004) first takes a look at the amount of integration of the European financial markets. Integration of financial markets is pursued because it is expected to lead to economic growth and employment creation because of increased efficiency. An indicator for financial integration that is often used, are cross border mergers and acquisitions of financial institutions. Walter (2003) gives an overview of the value of mergers and acquisitions in the financial sector between 1986 and 2000. It is clear from his study that most of the financial restructuring in Europe was on an in-sector and domestic basis, namely 76 per cent. Only 29 per cent of the total amount of mergers and acquisitions in Europe were cross-border intra-European. Relatively most cross-border intra-European mergers were within the insurance sector and the banking sector had relatively the least cross-border intra-European mergers. The question is whether a European supervisor is needed before there are a lot of pan-European mergers occurring. Schoenmaker (2004) argues that although there are some differences between markets, the wholesale markets within the European financial system are integrated. In contrast, retail markets are not integrated at all. The convergence of consumer lending rates is small and this result suggests limited integration in retail markets. Reasons are both differences in language, cultural, consumer protection rules and taxation. The introduction of the Euro and the planned removal of legal and regulatory obstacles (*Financial Services Action Plan* of the European Commission) will probably increase the integration in the retail markets. Schoenmaker argues that when cross-border financial activity increases, it will become more difficult to supervise the financial system at a national level.

Restructuring Financial Supervision in Europe: More Centralization and Cross-Sector Integration

In the EU prudential supervision is based on home country control, which means that a financial institution is authorized and supervised in its home country. Home country control is combined with minimum standards and mutual recognition. When a financial institution becomes pan-European no additional supervision is needed. It is argued by proponents of home country control that the effectiveness of supervision is higher when the home country makes a group wide-assessment of the risk profile and the capital adequacy of a financial institution. In addition, efficiency of supervision is increased because financial institutions do not have different supervisors. This prevents duplication of effects and regulatory costs. Home country supervision authorities are only responsible for financial stability in the home country and not in the host countries. In case of a failure, home country taxpayers do not want to pay for the cross-border spillover effects that this failure has. Cross-border spillover effects or externalities will increase with the increased integration within the EU. As noted by Schoenmaker (2004) it is questionable whether home country control for supervision and host country responsibility for financial stability can be maintained. Cooperation in the field of crises-management, between home and host countries might be needed to deal effectively with cross-border externalities. Another possibility is centralization of supervision at the European level. A disadvantage is the loss of flexibility. This loss of flexibility is worse if countries are more asymmetric. A question that should be solved is who has to bear the fiscal costs of a possible bailout. Prati and Schinasi (1999) state that the ECB should get a larger role in crisis management. According to them national supervisors are less capable of assessing bank soundness and systemic risk adequately when there are more and more pan-European banking groups. Prati and Schinasi argue based on recent experience of the Group of Ten Countries that cooperation between the home and host supervisors is not in all cases successful. Vives (2001) highlights the questions of conflict of interest between home and host financial supervisors in case of a financial crisis and is in favor of supervision at a centralized level such that external effects between countries can be internalized properly.

At the moment the ECB decides whether to solve a general liquidity crisis the ECB does not need detailed information of each institution in order to make this decision. National central banks decide whether to give institutions liquidity support and need detailed information in order to decide on this. They need only to take care of financial stability within their region. This could make them reluctant to take into account externalities caused by financial institutions within their supervisory region. Schoenmaker (2004) argues that whether a centralized system is needed depends on the amount of cross-border externalities. These are at the moment limited, because (retail) financial institutions are mainly national. He argues that therefore the vision to remain supervision at a national level will remain popular. Although the amount of cross-border penetration of financial institutions is slowly increasing, it is limited. Some pan-European financial institutions have emerged and they could lead to cross-border externalities. If integration is almost completed and there are more pan-European (retail) financial institutions, it may be needed to have financial supervision at an European level. According to Schoenmaker it is important to cautiously select the rules and procedures for how to share the costs of potential bailouts how to design the political control mechanism for supervision at a European level.

Kremers, Schoenmaker and Wierts (2001) made an overview of the possible organizational structures of financial supervision. In Table 5 an overview is given of the main models.

Separate supervisors exist for banking, insurance and securities in the *sectoral* model. In the *functional* cross-sector model, 'twin peak', separate supervisors are present for prudential supervision and the conduct of business (two objectives of supervision). In the *integrated* cross-sector model there is one supervisor that combines supervision of banking, insurance, securities and prudential and conduct of business supervision.

Decentralized and with co-operation means that there is decision-making by consensus. Instead, if there is *co-ordination*, decisions are made by autonomous national decision-makers based on a rule (e.g. majority voting). In case of *centralization*, decision making on supervisory regulation and policy is done at a European level.

European countries differ in the way they have organized financial supervision. All basic organizational structure models can be observed somewhere. The supervision structure has changed in a lot of countries. As can be seen in Table 6 the trend is towards cross-sector supervision. The underlying reason for this is the increased amount of financial conglomerates, which makes the division between financial sectors more vague. Both the cross-sector functional and integrated model have become increasingly popular.

There are other arguments both for and against a separation of the responsibilities for monetary policy and supervision (see Eijffinger and De Haan, 1996). The first argument in favor is the possibility of a conflict of interests between both activities. A central bank, responsible for supervision of the financial system and, thus, also for failures of financial institutions, could be tempted to admit lower (money market) interest rates or higher money growth than would be desirable from the perspective of price stability, in order to avoid such failures. An example of this argument could be the Federal Reserve System in the late 1990's. The Fed was in this period very cautious with raising the Federal Funds Rate because of its consequences for the interest rate margins and reserves of the US Savings and Loan associations of which the balance sheets have deteriorated seriously after the S&L crisis.

A second argument to separate the authority on financial stability from that on monetary stability is the bad publicity usually associated with failures or rescue operations. This bad publicity could harm the reputation of the central bank in its function as a supervisory agency. A loss of reputation may also affect the credibility of monetary policy. However, formally having separated responsibilities implies the risks of inter-agency conflict, long deliberations and insufficient information exchange. This will become problematic when rapid decision-making about e.g. liquidity support is needed. An example of this argument is the failure of the BCCI bank, at the beginning of the 1990's, which was the only pan-Arabian bank with its headquarters in London and then, thereby, formally under the supervision of the Bank of England. The BCCI affair was quite harmful for the reputation of the Bank of England and triggered the creation of the *Financial Services Authority* (FSA) in the UK.

There are further arguments against a separation of financial supervision and the conduct of monetary policy. First, the central bank plays a crucial role in the smooth operation of the payments system and the associated financial risks. To limit these risks, the central bank wishes to supervise and regulate the participants of the payments system. Furthermore, the

▼*Table 6. The Organizational Structure of Financial Supervision: National Models in OECD Countries.*

Countries	Basic models		
	1. Sectoral	2. Cross-sector: functional	3. Cross-sector: integrated
European Union	Belgium	France (2003)	Austria (2002)
	Finland	Italy (1999)	Denmark (1988)
	Greece	Netherlands (2002)	Germany (2002)
	Luxembourg		Ireland (2001)
	Portugal		Sweden (1991)
	Spain		United Kingdom (1997)
Outside EU		Australia (1998)	Canada (1987)
		United States (1999)	Japan (2000)

Note: Between brackets the year of establishment of the new cross-sector supervisor(s).
Source: Courtis (2002) and ECB (2002), both in Schoenmaker (2004), who made his own classification.

central bank has a function as *lender of last resort* for the financial system and has in that capacity the task to supply instantly enough liquidity in the case of liquidity problems or rescue operations. Because of its function of lender of last resort, the central bank must always be informed by the financial supervisor(s) about (potential) crises in the banking system.

Various critics have argued that the situation where the ECB puts its resources at stake while national supervisors remain responsible for supervision, creates a huge potential for inter-agency conflicts (Folkerts-Landau and Garber, 1992). National supervisors may have interests of their own, like keeping national banks in business. Lacking expertise and the time to acquire any, the ECB is likely to follow the advice of the national supervisor if a crisis occurs. Led astray by possibly biased advice and information, the ECB may then create excess liquidity, thereby perhaps even compromising on its primary objective of price stability (Arnold, 1999).

This reasoning assumes that the ECB will act as lender of last resort. Surprisingly enough, no explicit reference is made in the Maastricht Treaty to the role of the ECB as a lender of last resort. However, the ECB has a responsibility for promoting the smooth operation of payment systems, including the provision of financing facilities to credit institutions. In this respect there is a potential for the ECB to act in the capacity as a lender of last resort as far as the provision of short-term liquidity is concerned (OECD, 1998). Furthermore, the trend towards greater financial integration will make it increasingly difficult to establish national dividing lines. Even when a bank problem can be identified as a national one, it may quickly become European in scope, warranting action by the central bank. Indeed, Goodhart and Schoenmaker (1995) find that in most banking problems in the history of industrial countries central banks have been involved.

However, in crisis management the creation of central bank money is just one category of emergency action. The central bank may not be the provider of liquidity assistance. Funds may also come from the private sector (i.e. other financial institutions) or from the government (i.e. the taxpayers). In the latter case the European Commission will be involved in scrutinizing and authorizing such actions, since state aid must be compatible with the EU's competition legislation. According to Padoa-Schioppa (1999) the textbook case for emergency liquidity assistance to individual institutions has been a rare event over the past decades. Furthermore, the emergence of the single euro money market lowers bank's liquidity risk, because the number of possible sources of funds is now considerably larger than in the past. If a liquidity crisis would occur, the Eurosystem has – at least according to Padoa-Schioppa – the necessary capacity to act.

The lender of last resort function of the ECB requires that it will have some monitoring powers as well. This is possible without amending the Maastricht Treaty. The case for an *European Financial Services Authority* (EFSA) is based on the underlying tendency toward the integration of intermediary and market operations and the relief arising from the existence of an independent agency with a well-defined mission with no conflict between monetary policy and banking supervision (see Vives, 2000 and Eijffinger, 2001). Such an EFSA would increase the democratic accountability and transparency of banking supervision in Europe. Nevertheless, it would imply a change in the Maastricht Treaty. Experiences with the Financial Services Authority in the UK and other countries (e.g. Sweden) may serve as a laboratory in supervision.

The European Central Bank and Financial Supervision

As a consequence of integration of payment systems and the inter-bank market within the EMU, systemic risk increased. A close link between the European system of financial supervision and the ECB is needed in order to ensure financial stability. The ECB has an operational and regulatory role in the payment system. Payments systems should be safe and efficient in order to get an effective and stable functioning financial system. Schoenmaker (2004) states that the euro system considers that there should be close co-operation between the supervisors of banks and the supervisors of the payment system. It would lead to less financial system risk and therefore increased stability.

In the Maastricht Treaty there is a separation between the task of monetary policy and the task financial supervision and stability, although there is a relationship between oversight on the payment system and some broader functions why financial supervision and stability are necessary. According to Schoenmaker one could give the ECB a financial supervision task, if it is thought to be desirable. A treaty basis is needed if one wants to create a *European System of Financial Supervisors* (ESFS). Provisions that are linked to the ECB could be amended. The independence of the monetary function should be kept and a cross-sector supervisor function with political accountability could be defined.

The Lamfalussy approach stimulates the convergence of supervisory practices. Differences in supervision that remain will occur because of differences in financial structures between countries. After convergence has taken place there will be more similar policy (supervisory standards based on best practices) and this gives the EU a more level playing field (EFC, 2002). The system of financial supervision will become more efficient. In addition, centralization will be more desirable because the costs in terms of lost flexibility will be lower.

Centralization at an European level may be desirable if the number of cross-border externalities increases. Schoenmaker mentions the ESFS, which could co-operate with the national supervisors. This does not mean that all supervision has to be done at a centralized level. Home countries can still have the task of small and medium-sized financial institutions supervision. In many cases field inspections are performed and this is best done at the local level. Instead the supervision of large pan-European financial institutions could be centralized. The policy framework (the reporting requirements, the rule book, the reporting format and computer systems) could be made uniform as well. In order to make local supervisors adhere to this framework one could design the appropriate decision-making and incentive mechanism. In addition, pooling of information could be helpful in decreasing systemic risk. Schoenmaker argues that the fiscal costs of possible bail-outs should still be at a national level, because there is no European budget available. He concludes that supervision of financial institutions will become a combination of national and European characteristics.

De Boissieu (2003) is in favor of making the implementation of the lender of last resort function clearer. He pleads for subsidiarity as the main basic principle of banking supervision within the European Union. He distinguishes three forms of supervision systems, namely the central bank model, the dual model and the FSA model. In the first supervision structure, banking supervision is in the hands of CB or committee/commission that is highly dependent on the CB. In the dual model, the Ministry of finance or a commission that is attached to it or an independent committee takes care of the banking supervision. The central bank gives technical assistance. In this dual model a high degree of cooperation between the supervisors is present. The last model is the FSA model. In this model an independent organization monitors all banking and financial activities. He states that although the last model gets more attention, institutional convergence within the European Union is only small. It is argued that subsidiarity should be kept as a rule because local/national authorities keep their comparative information advantage. They are still better in gathering local information and monitoring domestic banks. They are better able to implement pillar one and two of Basel II. De Boissieu argues that for several reasons more coordination in the field of banking supervision and financial stability is needed. First of all, the increased number of financial conglomerates, the integration of capital markets and the increase in mergers and acquisitions (M&As) in the banking and insurance sector lead to more spill-over effects. Although coordination in banking supervision has increased, it has not increased enough. Multilateral supervision cooperation occurs mostly in the field of macro-prudential supervision and coordination of micro-prudential supervision occurs mainly in a bilateral manner.

De Boissieu says that fully decoupling of prudential policy from monetary policy is not possible. He states that the optimal amount of centralization and coordination can differ between supervision of financial institutions and lender of last resort interventions. In the first case local information is important. In case of the lender of last resort more centralization is important because during systemic crises externalities are increasing a lot. In addition quick intervention is needed and local information is less decisive for these operations.

Di Noia and Di Giorgio (1999) argue that banking supervision should be done by an agency that is separated from the central bank. They state that functional separation is desirable. OECD countries are divided in countries where the central bank is a monopolist in banking supervision and countries in which this is not the case. The latter countries have lower inflation rates and less volatile inflation rates. Banks supervised by the central bank are more profitable but face larger staff costs and issue less bonds. This could indicate lower efficiency. Although the data that was used by them was not definitively in favor of a separation of the supervision agency and the central bank some reasons are mentioned why separation should occur. The reasons mentioned are: the evolution of financial intermediaries, moral hazard problems, cost accountability. Separation could make it more transparent who is paying for monetary policy and who is for banking supervision. Di Noia and Di Giorgio favour also an independent ESFS structure. This supervision structure should be similar to the structure of the ESCB. This means that national agencies in EU member countries should participate actively. They want two European financial regulation agencies, which are formally separated from the ECB. The first agency would be responsible for the stability of all intermediaries and the second agency is responsible for transparency and disclosure requirements. They believe that comprehensive coordination of legislation and execution of regulation in financial markets could be achieved in this way. They propose to place both agencies at the center of the ESFS.

Walter (2001), however, argues in favor of a single European regulator, an EFSA. He thinks that it is unavoidable if one wants an integrated single financial market within Europe. He states that financial markets are integrated enough to have one regulator. The single European agency should not be bureaucratic and supervise every institution. He supports the idea of a federal structure, like the European *System* of Central Banks (ECB and NCBs). The EFSA should be in the center of the European System of Financial Regulators. Tasks of the EFSA would include harmonization and co-ordination of financial regulation and the design of common principles and guidelines. In addition the EFSA should check whether the rules are implemented consistently across all European countries. Another task of the EFSA could be the monitoring of large pan-European banking groups. Walter wants a separation between the EFSA and the ECB because they have conflicting interests, clearly defined mandates are needed and basic democratic principles have to be satisfied. He argues that cooperation between the EFSA and the ECB and national central banks is desirable and states that the model used in Germany is a good role model for Europe.

Vives (2001) analyzes the restructuring of financial regulation in the EMU. He states that a financial supervision system in which NCBs are responsible for financial stability could lead to some problems. First of all, there will be a conflict in interest when a transnational crisis occurs. National supervisors will only take into account the effects of a crisis on the financial stability in their own country and neglect the adverse effects the crisis could have on other countries. Secondly, national authorities could execute too much intervention because they will listen more to domestic interest groups that see some institutions as too big too fail. Too much intervention will take place as well if the costs of intervention are distributed over the whole EU. This happens in case of concern of general financial stability within the EU. Thirdly, there are some regulatory jurisdiction problems. The question is who wants to bail out financial institutions that are located in more than one European country because not all the benefits of a bailout go to one country. The fourth problem mentioned by him is the fact that a national supervisor is not able to provide sufficient help in case of a crisis, because of contagion to other countries that can take place. The last problem is a fiscal issue. It is not clear how high the rescue amount has too be and how the payment and losses have to be divided across countries. Some arguments can be put forward to give the central bank supervision tasks. The central bank can distinguish whether a problem is a problem of liquidity or of solvency and this minimizes the losses that occur wit loans granted. The central bank could be a crises manager and determine what the best kind of intervention is. In addition it can have economies of scope in information gathering by combining the tasks of providing liquidity and supervision. More banking supervisory information within the ECB could improve the accuracy of the macroeconomic forecasts. Vives argues that the only institution that can guarantee stability is the ECB. Coordination in case of crisis situations is not enough. Instead quick centralized interventions should be taken. In addition he suggests that the ECB should publish the formal framework of crisis resolution. It should be made transparent in which cases the NCBs need to intervene and in which cases this task is for the ECB. He points out that the ECB should perform some monitoring tasks as well. It should get the power to access and gather supervisory information. As a consequence costs in communication and negation will decrease and the exchange of information could be facilitated. Amendment of the Maastricht Treaty is not needed to achieve this. It is important to have a procedure that describes how losses in case of lender of last resort activities are divided between countries. The Ecofin could be consulted when such operations are needed. The costs of bargaining ex post are reduced when the crisis procedures are clear and in case of a crisis situation fast intervention is possible. Vives states that cooperation is not enough in case of an integrated European market. A centralized supervisor is needed and could lead to even further integration of European markets. The establishment of an independent EFSA that has authority over banking, insurance and securities would have some advantages. Firstly, it might better resist the local pressure to assist particular institutions. Furthermore, accountability would be facilitated because the ECB and the ESFA have clear missions. This prevents the conflict monetary policy and supervision. In addition, it would prevent an increase in the power of the ECB and would let the ECB remain its credibility in monetary policy. Vives argued in 2001 that an ESFA was not desirable yet because there was not enough political integration within Europe. The ESFA would therefore face the same accountability problems that the ECB faces because a well-defined political principle is missing.

Conclusion: Towards a European Financial Services Authority

Based on the previous analysis, I personally think that in the long run the best system for European financial supervision will be a European Financial Services Authority (see also Eijffinger, 2001). There will be a tendency to more integrated supervision because of the long-run trend to financial conglomerates in Europe. Next to that there will also be a development towards more cross-border supervision depending on the pace of cross-border mergers and acquisitions. The cross-border externalities between EU financial institutions and markets will become increasingly important. This means that there will be in the long run a federally organized financial supervision structure with the EFSA at the centre in which national supervisors (NCBs and national FSAs) still have supervision tasks. Like the ESCB, it will have all the characteristics of a ‘hub and spokes’ system. Of course, quite crucial will be the decision about the degree of centralization of financial supervision. When the degree of centralization is high, we could speak of a “strong” EFSA. Instead, when the degree of centralization is low, the EFSA is said to be “weak”. In both systems the ECB has an important role to play because of its responsibility for financial stability in general and its function of lender of last resort in particular. The difference between the “weak” and “strong” EFSA will also determine the relative influence of the ECB, which will be higher in case of a “strong” EFSA (high degree of centralization). Financial supervisors and academics see these tendencies very well, but it is up to the political authorities to take timely steps in this direction. It would be good news if the EU political authorities (Ecofin, European Commission and European Parliament) would open a serious debate on whether and how European financial supervision should be concentrated with a newly established EFSA and what the future role of the ECB should be in this respect. I fear, however, that we need a major European financial crisis (e.g. a serious bank failure in France, Germany or Italy) before the political authorities will become aware of this jump to a European level of financial supervision.

References

Arnold, I. (1999), 'The third leg of the stool. Financial stability as a prerequisite for EMU', Weltwirtschafliches Archiv, 135(2), 280-305.

Beck, T. , A. Demigüç-Kunt and R. Levine (2002), Law, Endowments and Finance, NBER Working Paper, n. W9089.

Boissieu, C. de (2003), 'The European Banking Industry and the Organization of Banking Supervision in Europe', Symposium by the Oesterreichische Nationalbank, 13-14 June.

Boissieu, C. de (2003), 'Financial Stability, Banking Supervision and the ECB', briefing paper, May 2003.

Courtis, N. (2002), How Countries Supervise their Banks, Insurers and Securities Markets 2003, London: Central Banking Publications.

Demigüç-Kunt, A. and R. Levine (1999), Bank Based and Market Based Financial Systems: Cross Countries Comparisons, Development Research Group, Finance Department, World Bank.

Di Noia, C. and Giorgio Di G. (1999), Should Banking Supervision and Monetary Policy Tasks Be Given to Different Agencies?, International Finance, 2(3), pp.361-78.

European Central Bank (2001), 'The Role of Central Banks in Prudential Supervision', Frankfurt am Main.

European Central Bank (2002), 'Structural Analysis of the EU Banking Sector: Year 2001', Frankfurt am Main.

Economic and Financial Committee (2002), 'Report on EU Financial Integration', European Economy Economic Papers, No. 171, Brussels.

Eijffinger, S.C.W. and J. de Haan (1996), 'The Political Economy of Central-Bank Independence', Princeton Special Papers in International Economics, no. 19.

Eijffinger, S.C.W. and J. de Haan (2000), European Monetary and Fiscal Policy, Oxford: Oxford University Press.

Eijffinger, S.C.W. (2001), 'Should the European Central Bank Be Entrusted with Banking Supervision in Europe?', Briefing Paper on "The Conduct of Monetary Policy and an Evaluation of the Economic Situation - 2nd Quarter 2001" (May 2001) for the European Parliament (www.europarl.eu.int/comparl/econ/emu/default_en.htm).

Folkerts-Landau, D. and P.Garber (1992), 'The ECB: a bank or a monetary policy rule?', in: M.B. Canzoneri, V. Grilli and P.R. Masson (eds.), Establishing a Central Bank: Issues in Europe and Lessons from the US, Cambridge: Cambridge University Press.

Goodhart, C. and D. Schoenmaker (1995), 'Should the Functions of Monetary Policy and Banking Supervision be Separated?', Oxford Economic Papers, 47, 539-560.

Lannoo, K. (1999), 'Financial Supervision in EMU', Centre for European Policy Studies.

Kaufmann, D. Kraay A. and Mastruzzi M. (2003), Governance Matters III: Governance Indicators 1996-2002, World Bank Policy Research Department Working Paper.

Kremers, J., D. Schoenmaker and P. Wierts (2001), 'Does Europe Need a Euro-wide Supervisor?', Financial Regulator 6, pp. 50-56.

Kremers, J., D. Schoenmaker and P. Wierts (2003b), 'Cross-Sector Supervision: Which Model?', in: R. Herring and R. Litan (eds), Brookings-Wharton Papers on Financial Services: 2003, Washington D.C.: Brookings Institution.

Lamfalussy Report (2001), 'Report on the Regulation of European Securities Markets', Brussels: European Commission.

Masciandaro, D. and Porta, A. (2004), 'Single authority in financial market supervision: Lesson for EU enlargement', in Masciandaro, D. (ed.) 'Financial intermediation in the New Europe', Edward Elgar, Cheltenham, (forthcoming).

Masciandaro, D. (2004a), 'Central banks or single financial authorities? A political delegation approach', in Masciandaro, D. (ed.) 'Central banks and single financial authorities in Europe', Edward Elgar, Cheltenham, (forthcoming).

Masciandaro, D. (2004b), 'Unification in financial sector supervision: the trade-off between central bank and single authority', Journal of Financial Regulation and Compliance, Vol. 12, No.2.

OECD (1998), Economic Outlook, December 1998, Paris: OECD.

Padoa-Schioppa, T. (1999), 'EMU and Banking Supervision', lecture at LSE, 24 February 1999 (http://www.ecb.int.key/sp99024.htm).

Padoa-Schioppa, T. (2003), 'Financial Supervision: Inside or Outside Central Banks', in: J. Kremers, D. Schoenmaker and P. Wierts (eds), Financial Supervision in Europe, Cheltenham: Edward Elgar.

Prati, Al. and G. Schinasi (1999), 'Financial Stability in European Economic and Monetary Union', Princeton Studies in International Finance, No 86.

Schoenmaker, D. (2004), Financial Supervision: from National to European?, Financial and Monetary Studies, vol.22 no. 1, 2003-2004.

Vives, X. (2001), 'Restructuring Financial Regulation in the European Monetary Union', Journal of Financial Services Research 19, p. 57-82.

Walter, N. (2001), 'The Banking Supervision Issue in Europe', Briefing Paper for the Committee on Economic and Monetary Affairs of the European Parliament, May 11.

Footnotes

1 In the UK all financial supervisory tasks are now concentrated in the Financial Services Authority (FSA), including banking supervision (formerly belonging to the Bank of England). The FSA has rule-making powers and co-operates with exchanges and clearing houses. It is accountable to the government and parliament. The Bank of England remains responsible for ensuring the overall stability of the financial system, which involves monitoring and, when necessary, intervening in the market. A mega-supervisor has certain advantages. There are economies of scale in supervision, as well as some practical advantages. There is a one-stop-shopping for conglomerate financial groups. Expertise is pooled and co-operation between the different functional supervisors is guaranteed. Still, the differences in risk profiles and in the nature of the businesses remain an important argument against a mega-supervisor, most importantly for banking as compared to the insurance business (Lannoo, 1999).

2 The Maastricht Treaty establishes however a simplified procedure that makes it possible without amending the Treaty, to entrust specific supervisory tasks to the ECB.

3 Demigüç-Kunt and Levine (1999).

4 World Bank (2001), World Development Indicators I, Stock Markets 5.3.

5 Masciandaro (2004b) constructed the index using all the indicators proposed by Kaufmann et al. (2003).

6 Beck, Demigüç-Kunt and Levine (2002).

7 Beck, Demigüç-Kunt and Levine (2002).

8 Constructed on the basis of the indices of Demigüç-Kunt and Levine (1999).

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